



STATE OF MARYLAND

DHMH

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April 18, 2007

Public Health & Emergency Preparedness Bulletin: # 2007:15
Reporting for the week ending 04/14/07 (MMWR Week #15)

Current Threat Levels:

National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

REVIEW OF DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

| Meningitis: | <u>Aseptic*</u> | <u>Meningococcal*</u> | *(non-suspect cases) |
|--------------------|--|------------------------------|-----------------------------|
| New cases: | * Data not yet released from Division of Communicable Disease Surveillance | | |
| Prior week: | * Data not yet released from Division of Communicable Disease Surveillance | | |
| Week#15, 2006: | 1 | - | |

8 outbreaks were reported to DHMH during MMWR Week 15 (April 8-14, 2007):

5 Gastroenteritis outbreaks

5 outbreaks of GASTROENTERITIS associated with Nursing Homes

2 Respiratory illness outbreaks

1 outbreak of INFLUENZA-LIKE ILLNESS associated with an Institution

1 outbreak of ILI/PNEUMONIA associated with a Nursing Home

1 Rash illness outbreak

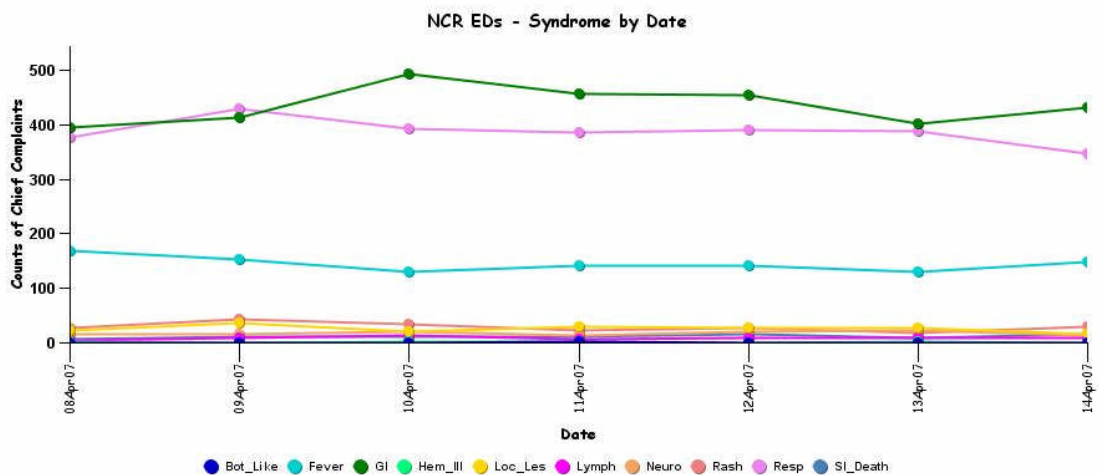
1 outbreak of CHICKENPOX associated with a School

SYNDROMIC SURVEILLANCE REPORTS:

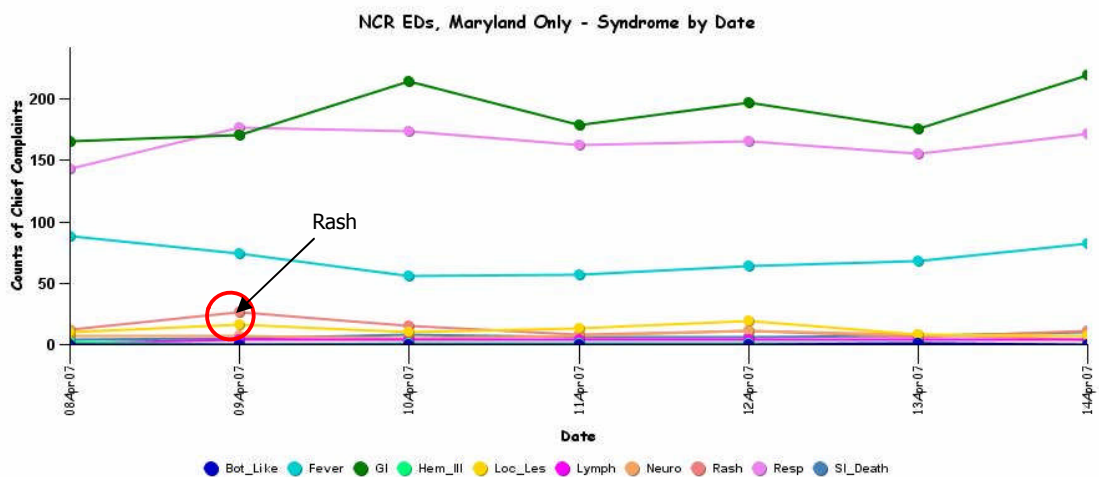
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts only.

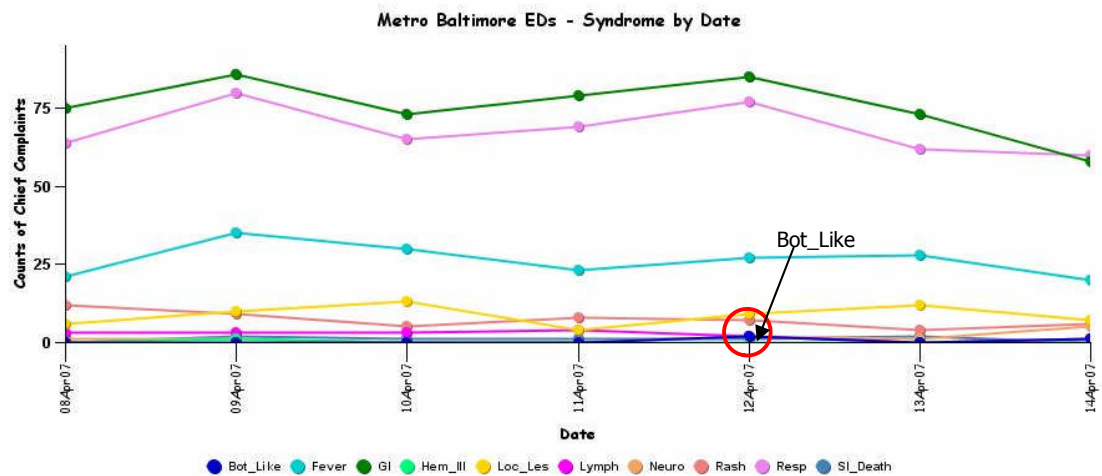
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness. * Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system

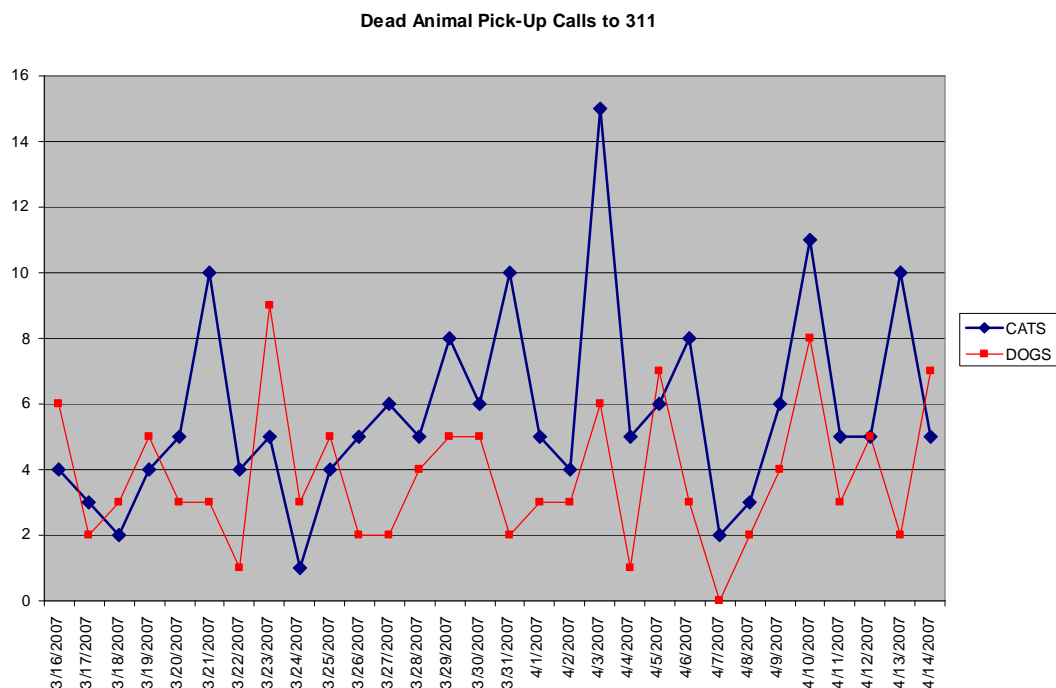


* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system



* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

Baltimore City Syndromic Surveillance Project: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

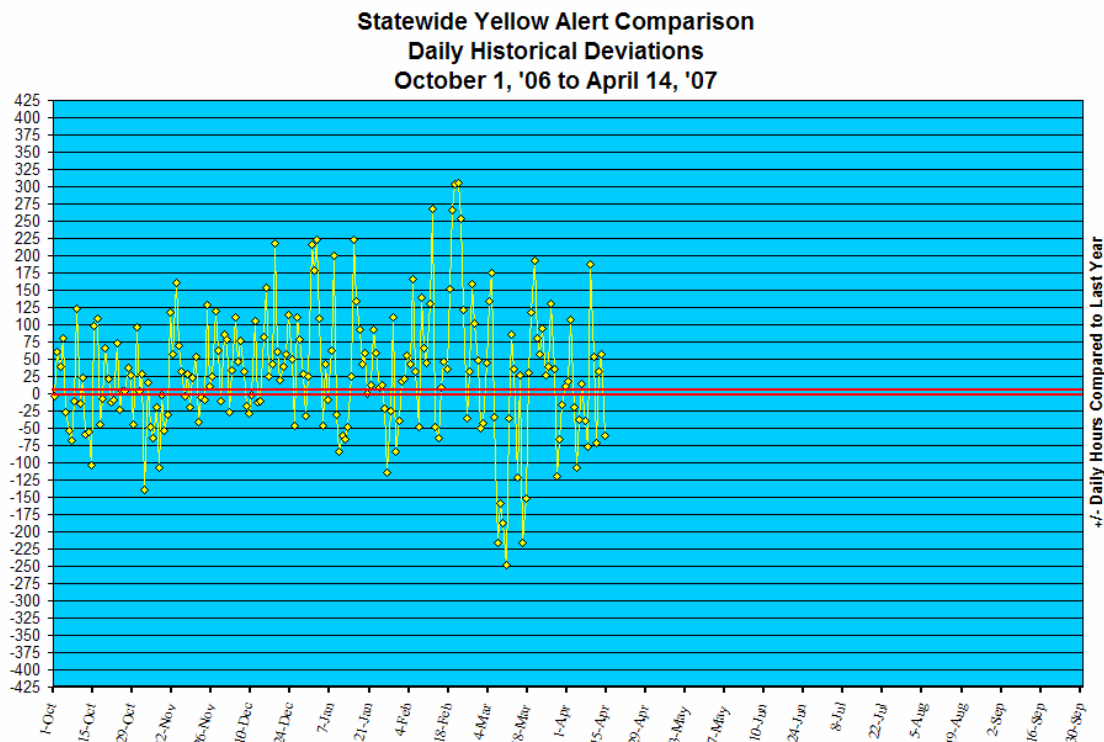


REVIEW OF MORTALITY REPORTS:

OCME: OCME reports no suspicious deaths related to BT for the week

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/06.

**NATIONAL DISEASE REPORTS:**

SHIGELLOSIS (Texas): 11 Apr 2007, The Williamson County Health District reported 34 cases of shigellosis in the area. Last week, 22 absences at Forest Creek Elementary in Round Rock were attributed to the diarrhea-causing bacterium. Round Rock Independent School District sent letters to parents last week, letting them know about the cases and how to prevent the spread. On Tuesday April 10 another letter went to parents of students at Ridgeview Middle School, where there were 2 confirmed cases. Three other schools will receive a similar letter as a precaution. Forest Creek Elementary custodial staff continued to wipe down surfaces, especially in the bathroom area, several times a day. Teachers reminded students to wash their hands often and thoroughly. Schools, especially with younger children, are not uncommon settings for the spread of shigellosis. Since, unlike most enteric pathogens, the spread of shigellosis requires only a very small number of organisms, it is easily spread from child-to-child. (Food safety threats are listed in Category B on the CDC list of Critical Biological Agents)* Non-suspect case

INTERNATIONAL DISEASE REPORTS:

CRYPTOSPORIDIOSIS (Ireland): 9 Apr 2007, Galway's water supply has been hit by an outbreak of the parasite cryptosporidium, with up to 170 people now confirmed to have been hit by a serious stomach bug as a result. The outbreak has severely affected homes and businesses in Ireland's 3rd-biggest city, and residents have been warned that the crisis could last for months. Doctors have warned that the parasite could be life threatening, especially to young children, the elderly and people with low immune systems. Tests found that the city's water supply contained nearly 60 times the safe limit of cryptosporidium pollution. Residents have already been unable to drink or use water for food preparation for weeks and have complained that no free clean water has been made available by the authorities. Parents with young families have also expressed real concerns and demanded action. Galway City Council has told the BBC News

website that they have been advised by the health authorities that tankers of free water could create further health problems, by increasing the risk of spreading bacteria. Business leaders have also expressed worries over the impact the crisis will have on what is traditionally the beginning of the tourist season in the west of Ireland. One hotelier said it was costing him up to 2000 euros a week to provide bottled water for his guests, and he was now being forced to install his own filtration system. However, Galway GP Martin Daly warned that filtration was not the answer. "The newest water treatment plant we have is 40 years old," he said. "People have been warning for years about this. Filtration is not the answer. We need to go to the source of the contamination to solve it." (Water safety threats are listed in Category B on the CDC list of Critical Biological Agents)* Non-suspect case

CHOLERA (Kenya): 11 Apr 2007, A nationwide alert has been sounded following the death of 10 people from cholera in the expansive West Pokot district. Local health facilities are grappling with a high number of patients, following revelations that 76 people have been infected with the killer disease in Sigor division. Shocked by the quick spread of the disease, health authorities have ordered the closure of all eating establishments in the area and asked residents to be very careful about the foods and drinks they consume. The Health ministry has also announced plans to conduct an aggressive campaign to educate people on ways of preventing cholera. However, acting Rift Valley provincial medical officer Simon Kibias said cholera had been confirmed in only one of the admitted patients. He said specimens had been sent to the ministry of Health's central laboratory and the Kenya Medical Research Institute, Nairobi, for further analysis. Dr. Kibias said diarrhea had been detected in most of the 76 cases. Residents fear that the deaths will increase since health facilities are scarce. People travel for more than 60 miles to get treatment. Getting clean water in the district is very difficult. Many villagers depend on the perennial Muruny River. Frequently, people swim and bathe in the river. Although there are 3 boreholes, 2 of them have broken down. Many residents do not draw water from the functioning borehole, saying it is located far away. (Water safety threats are listed in Category B on the CDC list of Critical Biological Agents)* Non-suspect case

ANTHRAX, HUMAN, BOVINE (Guinea-Bissau): 12 Apr 2007, One person died and a further 7 were infected in a recent anthrax outbreak in Guinea-Bissau that was apparently caused by eating bad meat, the health ministry said on Monday April 9. Between March 24 and April 6, cases of the disease were recorded in Bissaora, a town 44 miles north of the capital Bissau, said the ministry's director general, Placido Cardoso. "The people affected by the disease had eaten contaminated meat during a traditional mass circumcision ceremony," he said. Cardoso did not say where the bad meat had come from but said a veterinary team had been sent to the region. He added that 5 cases of anthrax infection in cows had been recorded in Quinhacam village, in the same area, and the local population had been warned against eating meat of uncertain origin. Anthrax is an infectious disease caused by the *Bacillus anthracis* bacteria, found in wild cattle and domestic livestock. It can be caught by humans through exposure to infected animals or their undercooked meat. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents)* Non-suspect case

LASSA FEVER (Liberia): 13 Apr 2007, Liberia's almost non-existent health and sanitation infrastructure was again brought into sharp focus this week as officials confirmed that Lassa fever, caused by a virus transmitted by rats usually found in areas with poor sanitation, is endemic for the 2nd time in 6 months in 3 Liberian counties. Liberia, which experienced a devastating 14-year civil war that ended in 2003, last registered Lassa fever outbreaks in September 2006, mostly in Nimba County. Health officials said at the time they did not have the capacity to diagnose or treat the deadly disease but the outbreak ended after the Chinese Embassy stepped in with funds for medicines and testing kits. Mildred Wesseh, a Ministry of Health spokesperson, told the Integrated Regional Information Networks on Wednesday April 11 that the ministry has now confirmed a further 13 cases in Nimba County, close to the border with Guinea and Cote d'Ivoire. Cases have also been reported in Bong County and Lofa, according to the Health Ministry. "We are very concerned about the active circulation of Lassa fever virus and are now putting in place mechanisms to deal with the disease, especially in the affected areas," Wesseh said. She said 5 people suspected of having the disease died, but health authorities had not confirmed whether the cause of death was Lassa. Some 21 suspected cases have been reported but only 13 were confirmed, and those who were currently infected with Lassa virus were being given medication, she said. Lassa is a viral hemorrhagic fever known to be endemic in Liberia, Guinea, Sierra Leone and parts of Nigeria. Humans become infected with Lassa from contact with infected rodents. The virus can also be transmitted from one human to another through direct contact with body fluids. (Viral hemorrhagic fevers are listed in Category A on the CDC list of Critical Biological Agents)* Non-suspect case

ANTHRAX, HUMAN, LIVESTOCK (Indonesia): 14 April 2007, The deaths of 5 people in 2 villages in West Sumba region, East Nusa Tenggara [Nusa Tenggara Timur], have led authorities to quarantine both areas due to a suspected outbreak of anthrax. The residents, from Kapaka Madeta and Kawangohari villages, died after consuming beef at the end of last month. Laboratory results from Makassar, South Sulawesi, showed meat samples taken from buffaloes, horses and cows positively infected with the *Bacillus anthracis* bacteria, which causes anthrax. The local administration says the outbreak in the 2 villages is an extraordinary situation and a number of relevant agencies are making efforts to vaccinate and treat thousands of hot-blooded animals, including goats, pigs, sheep and deer. The last outbreak occurred in 1987 on Sabu Island, Kupang regency, resulting in one human death as well as the death of dozens of animals. During that outbreak, hundreds of people also suffered from malignant, blister-like swellings of pus. "Data shows that 40 people in East Nusa Tenggara have died of anthrax so far," said Maria Geong, Head of the Animal Health Division at the East Nusa Tenggara Husbandry Office. Human infection occurs by direct physical contact with an infected animal. The disease can also be transmitted to humans by inhaling air containing the anthrax spore or eating meat from infected carcasses. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents)* Non-suspect case

AVIAN INFLUENZA-RELATED REPORTS

WHO update: The WHO-confirmed global total of human cases of H5N1 avian influenza virus infection as of 11 April 2007 stands at 291, of which 172 have been fatal.

AVIAN INFLUENZA, HUMAN (Cambodia): 10 Apr 2007, The Ministry of Health in Cambodia has confirmed the country's 7th case of human infection with the H5N1 avian influenza virus. It is the 1st case to be confirmed in humans in Cambodia in 2007. The patient, a 13-year-old girl from Ponhea Kreak district in Kampong Cham province, developed symptoms on April 2 and was hospitalized the following day. She died on April 5. Samples taken from the girl have tested positive for H5N1 at the Pasteur Institute in Phnom Penh. Initial investigations into the source of the girl's infection indicate the presence of sick and dead poultry in the village in recent weeks and that she had consumed a sick chicken prior to onset of symptoms. A team from the Ministry of Health, World Health Organization (WHO), and the Pasteur Institute are following up with close contacts of the girl and are conducting awareness-raising activities in the area. Of the 7 cases confirmed to date in Cambodia, all have been fatal.

AVIAN INFLUENZA, HUMAN (Egypt): 11 Apr 2007, A 15-year old girl has died of bird flu, apparently contracting the disease merely by buying a chicken at a market, a World Health Organization (WHO) spokesman said on Wednesday April 11. This death brings to 14 the number of Egyptians to have succumbed to the H5N1 virus since it first appeared in Egypt last year. Most of the fatalities have been women or girls whose families were raising poultry in the backyards, and having daily contact with chicken or turkeys. But this victim's family did not, said WHO spokesman Ibrahim el-Kardani. She is believed to have contracted the virus 3 weeks ago when she bought a chicken at a market in Shoubra, Cairo, while shopping for her Christian family's preparations for the Easter holidays, said el-Kardani. "She thought she wasn't exposed to chicken," el-Kardani said. Egypt is one of the countries most affected by bird flu outside Asia, where the outbreak began. The country lies on a main route for migratory birds, which are believed to have brought the disease from Asia.

*Cases and outbreaks will be cited for suspect level with regards to suspicion of BT threat. Therefore, cases and outbreaks will be categorized as "Determined BT", "Suspect" or "Non-suspect".

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

Questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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